

10/534,015

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

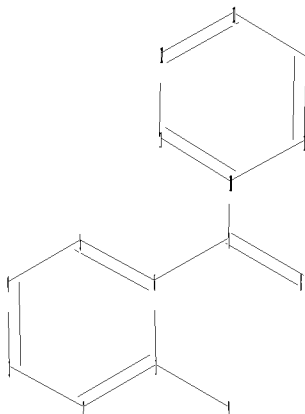
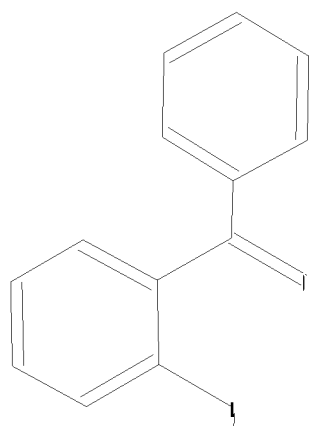
L * * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 14:12:52 ON 16 JUL 2008

=> file reg

=>

Uploading C:\Program Files\Stnexp\Queries\115.str



chain nodes :

7 8 9

ring nodes :

1 2 3 4 5 6 10 11 12 13 14 15

chain bonds :

1-9 6-7 7-8 7-10

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

exact/norm bonds :

1-9 7-8

exact bonds :

6-7 7-10

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15

isolated ring systems :

containing 10 :

G1: Cy, Ak

Match level :

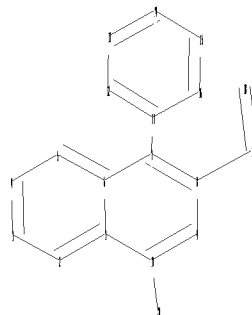
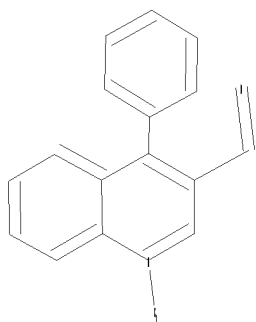
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom

10/534,015

L1 STRUCTURE UPLOADED

=>

Uploading C:\Program Files\Stnexp\Queries\015.str



chain nodes :
17 18 20
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
chain bonds :
7-11 8-17 10-20 17-18
ring bonds :
1-2 1-6 1-10 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 11-12 11-16 12-13 13-14
14-15 15-16
exact/norm bonds :
10-20 17-18
exact bonds :
7-11 8-17
normalized bonds :
1-2 1-6 1-10 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 11-12 11-16 12-13 13-14
14-15 15-16
isolated ring systems :
containing 11 :

G1: Cy, Ak

Match level :

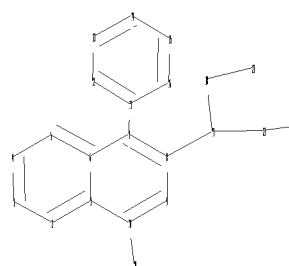
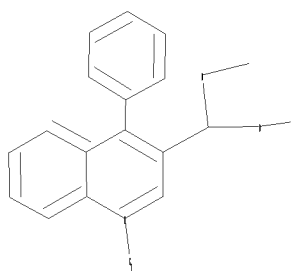
10/534,015

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS 18:CLASS 20:CLASS

L2 STRUCTURE UPLOADED

=>

Uploading C:\Program Files\Stnexp\Queries\215.str



chain nodes :

17 18 20 21

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

ring/chain nodes :

22 23

chain bonds :

7-11 8-17 10-20 17-18 17-21 18-23 21-22

ring bonds :

1-2 1-6 1-10 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 11-12 11-16 12-13 13-14
14-15 15-16

10/534,015

exact/norm bonds :
10-20 17-18 17-21 18-23 21-22
exact bonds :
7-11 8-17
normalized bonds :
1-2 1-6 1-10 2-3 3-4 4-5 5-6 6-7 7-8 8-9 9-10 11-12 11-16 12-13 13-14
14-15 15-16
isolated ring systems :
containing 11 :

G1: Cy, Ak

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS 18:CLASS 20:CLASS
21:CLASS 22:CLASS 23:CLASS

L3 STRUCTURE UPLOADED

=> s 12 full
L4 6 SEA SSS FUL L2

=> s 11 full
L5 1877 SEA SSS FUL L1

=> s 13 full
L6 0 SEA SSS FUL L3

=> file ca

=> s 15/prep
3056 L5
4596048 PREP/RL
L7 1103 L5/PREP
(L5 (L) PREP/RL)

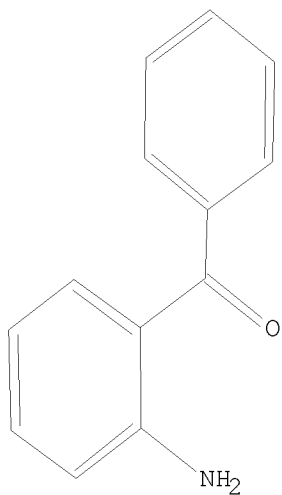
=> s 14
L8 3 L4

=> s 14/prep
3 L4
4596048 PREP/RL
L9 3 L4/PREP
(L4 (L) PREP/RL)

=> file reg

=> d 11
L1 HAS NO ANSWERS
L1 STR

10/534,015



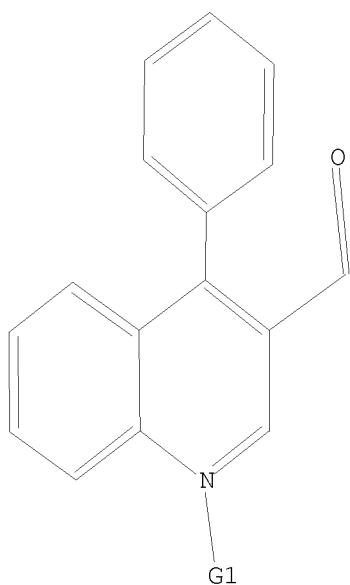
G1 Cy,Ak

Structure attributes must be viewed using STN Express query preparation.

=> d 12

L2 HAS NO ANSWERS

L2 STR



G1 Cy,Ak

Structure attributes must be viewed using STN Express query preparation.

10/534,015

=> d his

(FILE 'HOME' ENTERED AT 14:12:52 ON 16 JUL 2008)

FILE 'REGISTRY' ENTERED AT 14:18:59 ON 16 JUL 2008

L1 STRUCTURE UPLOADED
L2 STRUCTURE UPLOADED
L3 STRUCTURE UPLOADED
L4 6 S L2 FULL
L5 1877 S L1 FULL
L6 0 S L3 FULL

FILE 'CA' ENTERED AT 14:19:55 ON 16 JUL 2008

L7 1103 S L5/PREP
L8 3 S L4
L9 3 S L4/PREP

FILE 'REGISTRY' ENTERED AT 14:21:59 ON 16 JUL 2008

=> s l1

L10 50 SEA SSS SAM L1

=> file ca

=> s l1

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

1 50 SEA SSS SAM L1

L12 49 L11

=> d his

(FILE 'HOME' ENTERED AT 14:12:52 ON 16 JUL 2008)

FILE 'REGISTRY' ENTERED AT 14:18:59 ON 16 JUL 2008

L1 STRUCTURE UPLOADED
L2 STRUCTURE UPLOADED
L3 STRUCTURE UPLOADED
L4 6 S L2 FULL
L5 1877 S L1 FULL
L6 0 S L3 FULL

FILE 'CA' ENTERED AT 14:19:55 ON 16 JUL 2008

L7 1103 S L5/PREP
L8 3 S L4
L9 3 S L4/PREP

10/534,015

FILE 'REGISTRY' ENTERED AT 14:21:59 ON 16 JUL 2008
L10 50 S L1

FILE 'CA' ENTERED AT 14:22:36 ON 16 JUL 2008
S L1

FILE 'REGISTRY' ENTERED AT 14:22:38 ON 16 JUL 2008
L11 50 S L1

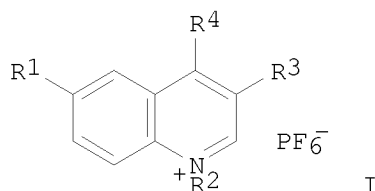
FILE 'CA' ENTERED AT 14:22:39 ON 16 JUL 2008
L12 49 S L11

=> s 15
L13 3056 L5

=> s l13 and 18
L14 0 L13 AND L8

=> d ibib abs fhitr 1-3 19

L9 ANSWER 1 OF 3 CA COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 124:145857 CA
ORIGINAL REFERENCE NO.: 124:27121a,27124a
TITLE: The reverse Vilsmeier approach to the synthesis of
quinolines, quinolinium salts and quinolones
AUTHOR(S): Meth-Cohn, Otto; Taylor, David L.
CORPORATE SOURCE: Chem. Dep., Univ. Sunderland, Sunderland, SR1 3SD, UK
SOURCE: Tetrahedron (1995), 51(47), 12869-82
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 124:145857
GI



AB N-alkylformanilides 4-R1C6H4NR2CHO (R1 = H, Cl, MeO, Me; R2 = Me, CH2CH:CH2, CH2CHMe2, CH2Ph, Ph) react with various electron-rich alkenes in POC13 to give N-methylquinolinium salts I [R3 = CHCl2, CHO, Me, Et, Cl, CHMe2, CH2Ph, CH2Cl, CH2CH2Cl; R4 = H, Ph, C6H4Me-4, 2-thienyl, Et, Cl, morpholino; R3R4 = (CH2)n; n = 4-6, 8], generally in good yields. The alkenes can be vinyl acetate, an aldehyde or ketone enamine (preferably the morpholine enamine), a Me aryl ketone (reacting as its enol) or it may be generated from an alkanoamide bearing α -protons (which produces an α -chloroenamine in situ). The reaction is effective for a variety of formanilides as well as ring substituted anilides, though electron-withdrawing groups tend to inhibit cyclization. The mechanism of

the cyclization has been elucidated and shown to involve an electrocyclic $\pi 6s$ process. The reactions of formanilides with amides in POCl_3 gives 4-quinolones on alkaline workup.

IT 98888-84-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of quinolines, quinolinium salts, and quinolones using reverse Vilsmeier approach)

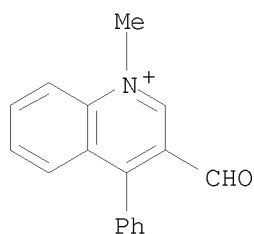
RN 98888-84-7 CA

CN Quinolinium, 3-formyl-1-methyl-4-phenyl-, hexafluorophosphate(1-) (9CI)
(CA INDEX NAME)

CM 1

CRN 98888-83-6

CMF C17 H14 N O

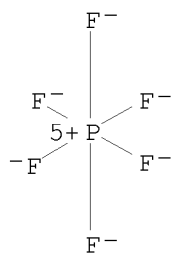


CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS



L9 ANSWER 2 OF 3 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 117:171184 CA

ORIGINAL REFERENCE NO.: 117:29589a,29592a

TITLE: Reduction of 2,3,4-substituted quinolines with sodium borohydride

AUTHOR(S): Vigante, B.; Ozols, J.; Duburs, G.

CORPORATE SOURCE: Inst. Org. Sint., Riga, 226006, Latvia

SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1991), (12), 1680-6

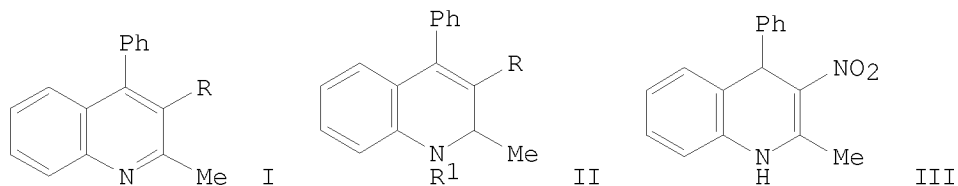
CODEN: KGSSAQ; ISSN: 0453-8234

DOCUMENT TYPE: Journal

LANGUAGE: Russian

10/534,015

OTHER SOURCE(S): CASREACT 117:171184
GI



AB Reduction of quinolines I (R = CO₂Et, CN, COMe, CPh, CONH₂, COSEt, SO₂Ph) by NaBH₄ in AcOH gave 1-ethyl-1,2-dihydroquinolines II (same R; R₁ = Et). The analogous reaction of I (R = NO₂) gave II (R = NO₂, R₁ = Et, H) and 1,4-dihydro derivative III. When HCO₂H was used instead of AcOH, II (R₁ = Me) were obtained.

IT 143755-33-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and reduction by borohydride)

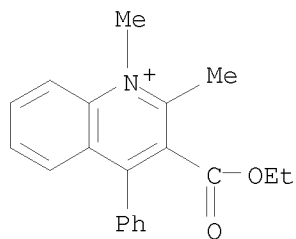
RN 143755-33-3 CA

CN Quinolinium, 3-(ethoxycarbonyl)-1,2-dimethyl-4-phenyl-, perchlorate (9CI)
(CA INDEX NAME)

CM 1

CRN 143755-32-2

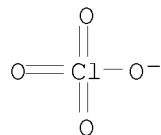
CMF C20 H20 N O2



CM 2

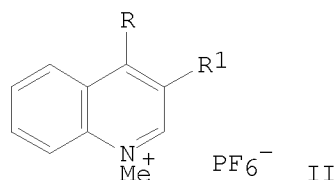
CRN 14797-73-0

CMF Cl O4



L9 ANSWER 3 OF 3 CA COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 104:19484 CA

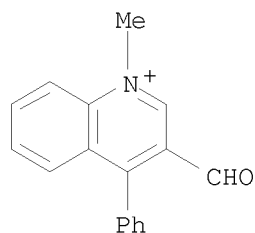
ORIGINAL REFERENCE NO.: 104:3277a,3280a
 TITLE: A versatile new synthesis of quinolines and related fused pyridines. 13. The synthesis of quinolines from N-alkylformanilides and electron-rich alkenes
 AUTHOR(S): Meth-Cohn, Otto
 CORPORATE SOURCE: Natl. Chem. Res. Lab., Counc. Sci. Ind. Res., Pretoria, 0001, S. Afr.
 SOURCE: Tetrahedron Letters (1985), 26(15), 1901-4
 CODEN: TELEAY; ISSN: 0040-4039
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 104:19484
 GI



AB HCONMePh (I) in POCl₃ reacts with aryl Me ketones to give N-methylquinolinium salts II (R = aryl, R₁ = CHO), with aldehyde and ketone enamines R₁CH:CRM (M = nitrogen function) to give II, and with CH₂:CHOAc to give II (R = H, R₁ = CHCl₂). For example, 10 mmol PhCOMe was treated with 40 mmol I in 5 mL POCl₃ for 10 min at 60°, then treated with 1.5 g NH₄PF₆ to give 69% II (R = Ph, R₁ = CHO).
 IT 98888-84-7P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 98888-84-7 CA
 CN Quinolinium, 3-formyl-1-methyl-4-phenyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

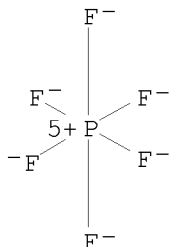
CRN 98888-83-6
 CMF C17 H14 N O



CM 2

10/534,015

CRN 16919-18-9
CMF F6 P
CCI CCS



=> file casreact
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 16.40 | 559.90 |

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| -2.25 | -2.25 |

CA SUBSCRIBER PRICE

FILE 'CASREACT' ENTERED AT 14:23:35 ON 16 JUL 2008
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT:1840 - 12 Jul 2008 VOL 149 ISS 3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

```
*****
*
*      CASREACT now has more than 13.8 million reactions      *
*
*****
```

Some CASREACT records are derived from the ZIC/VINITI database (1974-1999) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 12

SAMPLE SEARCH INITIATED 14:23:41 FILE 'CASREACT'
SCREENING COMPLETE - 70 REACTIONS TO VERIFY FROM 11 DOCUMENTS

100.0% DONE 70 VERIFIED 0 HIT RXNS 0 DOCS

10/534,015

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED VERIFICATIONS: 899 TO 1901
PROJECTED ANSWERS: 0 TO 0

L15 0 SEA SSS SAM L2 (0 REACTIONS)

=> s l2 full

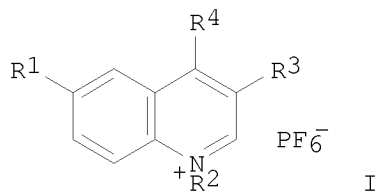
FULL SEARCH INITIATED 14:23:48 FILE 'CASREACT'
SCREENING COMPLETE - 1879 REACTIONS TO VERIFY FROM 156 DOCUMENTS

100.0% DONE 1879 VERIFIED 4 HIT RXNS 2 DOCS
SEARCH TIME: 00.00.01

L16 2 SEA SSS FUL L2 (4 REACTIONS)

=:ibib abs fhit

L16 ANSWER 1 OF 2 CASREACT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 124:145857 CASREACT
TITLE: The reverse Vilsmeier approach to the synthesis of
quinolines, quinolinium salts and quinolones
AUTHOR(S): Meth-Cohn, Otto; Taylor, David L.
CORPORATE SOURCE: Chem. Dep., Univ. Sunderland, Sunderland, SR1 3SD, UK
SOURCE: Tetrahedron (1995), 51(47), 12869-82
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

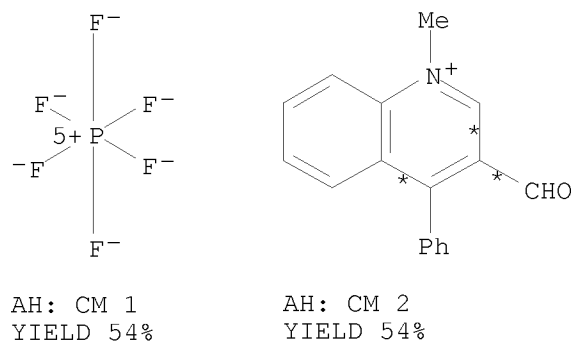
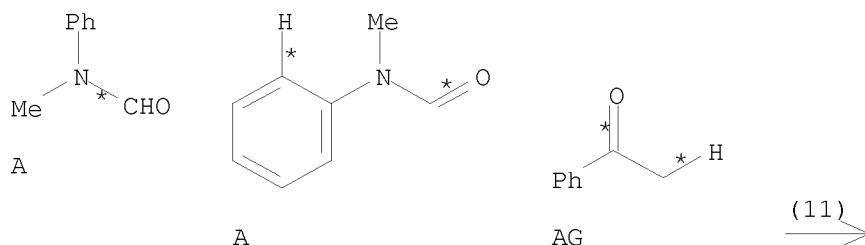


AB N-alkylformanilides 4-R1C6H4NR2CHO (R1 = H, Cl, MeO, Me; R2 = Me, CH2CH:CH2, CH2CHMe2, CH2Ph, Ph) react with various electron-rich alkenes in POCl3 to give N-methylquinolinium salts I [R3 = CHCl2, CHO, Me, Et, Cl, CHMe2, CH2Ph, CH2Cl, CH2CH2Cl; R4 = H, Ph, C6H4Me-4, 2-thienyl, Et, Cl, morpholino; R3R4 = (CH2)n; n = 4-6, 8], generally in good yields. The alkenes can be vinyl acetate, an aldehyde or ketone enamine (preferably the morpholine enamine), a Me aryl ketone (reacting as its enol) or it may be generated from an alkanoamide bearing α -protons (which produces an α -chloroenamine in situ). The reaction is effective for a variety of formanilides as well as ring substituted anilides, though electron-withdrawing groups tend to inhibit cyclization. The mechanism of the cyclization has been elucidated and shown to involve an electrocyclic

10/534,015

$\pi 6s$ process. The reactions of formanilides with amides in POCl_3 gives 4-quinolones on alkaline workup.

RX(11) OF 61 2 A + AG ==> AH



AH: CM 1
YIELD 54%

AH: CM 2
YIELD 54%

RX(11) RCT A 93-61-8

STAGE(1)
RGT D 10025-87-3 POCl_3

STAGE(2)
RCT AG 98-86-2

STAGE(3)
RGT E 16941-11-0 $\text{PF}_6\cdot\text{NH}_4$
SOL 141-78-6 AcOEt

PRO AH 98888-84-7

L16 ANSWER 2 OF 2 CASREACT COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 104:19484 CASREACT

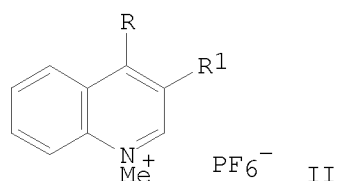
TITLE: A versatile new synthesis of quinolines and related fused pyridines. 13. The synthesis of quinolines from N-alkylformanilides and electron-rich alkenes

AUTHOR(S): Meth-Cohn, Otto

CORPORATE SOURCE: Natl. Chem. Res. Lab., Counc. Sci. Ind. Res.,

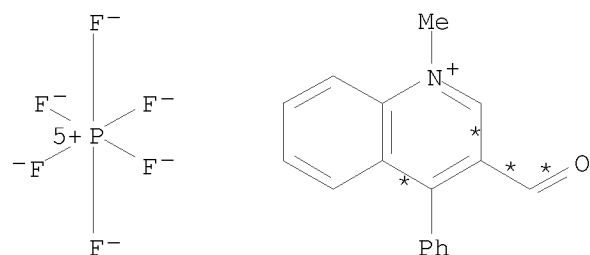
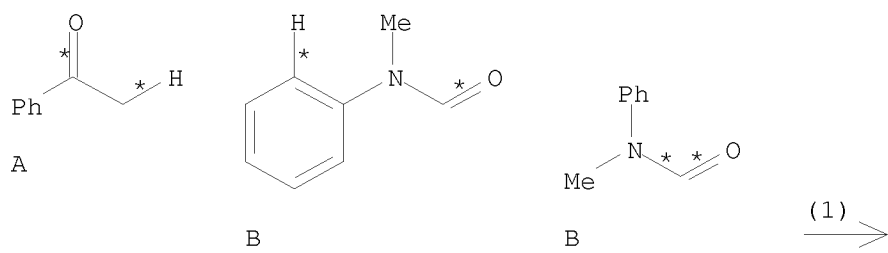
10/534,015

SOURCE: Pretoria, 0001, S. Afr.
Tetrahedron Letters (1985), 26(15), 1901-4
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



AB HCONMePh (I) in POCl_3 reacts with aryl Me ketones to give N-methylquinolinium salts II ($\text{R} = \text{aryl}$, $\text{R}_1 = \text{CHO}$), with aldehyde and ketone enamines $\text{R}_1\text{CH:CRM}$ ($\text{M} = \text{nitrogen function}$) to give II, and with $\text{CH}_2\text{:CHOAc}$ to give II ($\text{R} = \text{H}$, $\text{R}_1 = \text{CHCl}_2$). For example, 10 mmol PhCOMe was treated with 40 mmol I in 5 mL POCl_3 for 10 min at 60° , then treated with 1.5 g NH_4PF_6 to give 69% II ($\text{R} = \text{Ph}$, $\text{R}_1 = \text{CHO}$).

RX(1) OF 7 A + 2 B ==> C



C: CM 1

C: CM 2

RX(1) RCT A 98-86-2, B 93-61-8

STAGE(1)

10/534,015

RGT D 10025-87-3 POC13
SOL 10025-87-3 POC13

STAGE(2)

RGT E 16941-11-0 PF6.NH4
SOL 7732-18-5 Water, 141-78-6 AcOEt

PRO C 98888-84-7

=> s l3 full

FULL SEARCH INITIATED 14:24:23 FILE 'CASREACT'

SCREENING COMPLETE - 7 REACTIONS TO VERIFY FROM 5 DOCUMENTS

100.0% DONE 7 VERIFIED 0 HIT RXNS 0 DOCS
SEARCH TIME: 00.00.01

L17 0 SEA SSS FUL L3 (0 REACTIONS)

=> d his

(FILE 'HOME' ENTERED AT 14:12:52 ON 16 JUL 2008)

FILE 'REGISTRY' ENTERED AT 14:18:59 ON 16 JUL 2008

L1 STRUCTURE UPLOADED
L2 STRUCTURE UPLOADED
L3 STRUCTURE UPLOADED
L4 6 S L2 FULL
L5 1877 S L1 FULL
L6 0 S L3 FULL

FILE 'CA' ENTERED AT 14:19:55 ON 16 JUL 2008

L7 1103 S L5/PREP
L8 3 S L4
L9 3 S L4/PREP

FILE 'REGISTRY' ENTERED AT 14:21:59 ON 16 JUL 2008

L10 50 S L1

FILE 'CA' ENTERED AT 14:22:36 ON 16 JUL 2008

S L1

FILE 'REGISTRY' ENTERED AT 14:22:38 ON 16 JUL 2008

L11 50 S L1

FILE 'CA' ENTERED AT 14:22:39 ON 16 JUL 2008

L12 49 S L11
L13 3056 S L5
L14 0 S L13 AND L8

FILE 'CASREACT' ENTERED AT 14:23:35 ON 16 JUL 2008

L15 0 S L2
L16 2 S L2 FULL
L17 0 S L3 FULL

=> file ca

10/534,015

=> s 113 and quinolin?

83593 QUINOLIN?

L18 447 L13 AND QUINOLIN?

=> s prep? and 118

5131195 PREP?

L19 400 PREP? AND L18

=> d ti 1-10

L19 ANSWER 1 OF 400 CA COPYRIGHT 2008 ACS on STN

TI Indium(III) trifluoromethanesulfonate. An efficient reusable catalyst for the alkynylation-cyclization of 2-aminoaryl ketones and synthesis of 2,4-disubstituted quinolines

L19 ANSWER 2 OF 400 CA COPYRIGHT 2008 ACS on STN

TI Gold(III)-mediated aldol condensations provide efficient access to nitrogen heterocycles

L19 ANSWER 3 OF 400 CA COPYRIGHT 2008 ACS on STN

TI Application of heterogeneous solid acid catalysts for Friedlander synthesis of quinolines

L19 ANSWER 4 OF 400 CA COPYRIGHT 2008 ACS on STN

TI Synthesis and photo physical study of iridium complex of new pentafluorophenyl-substituted ligands

L19 ANSWER 5 OF 400 CA COPYRIGHT 2008 ACS on STN

TI An efficient and rapid approach to quinolines via Friedlaender synthesis catalyzed by silica gel-supported sodium hydrogen sulfate under solvent-free conditions

L19 ANSWER 6 OF 400 CA COPYRIGHT 2008 ACS on STN

TI Synthesis and evaluation of novel 3,4,6-substituted 2-quinolones as FMS kinase inhibitors

L19 ANSWER 7 OF 400 CA COPYRIGHT 2008 ACS on STN

TI Quinoline compounds as liver X receptor modulators and their preparation, pharmaceutical compositions and use in the treatment of LXR-mediated diseases

L19 ANSWER 8 OF 400 CA COPYRIGHT 2008 ACS on STN

TI Iodine-catalyzed Friedlaender quinoline synthesis under solvent-free conditions

L19 ANSWER 9 OF 400 CA COPYRIGHT 2008 ACS on STN

TI An improved quinoline synthesis in the presence of nickel chloride

L19 ANSWER 10 OF 400 CA COPYRIGHT 2008 ACS on STN

TI Implications for selectivity of 3,4-diarylquinolinones as p38 α MAP kinase inhibitors

=> d his

10/534,015

(FILE 'HOME' ENTERED AT 14:12:52 ON 16 JUL 2008)

FILE 'REGISTRY' ENTERED AT 14:18:59 ON 16 JUL 2008

L1 STRUCTURE UPLOADED
L2 STRUCTURE UPLOADED
L3 STRUCTURE UPLOADED
L4 6 S L2 FULL
L5 1877 S L1 FULL
L6 0 S L3 FULL

FILE 'CA' ENTERED AT 14:19:55 ON 16 JUL 2008

L7 1103 S L5/PREP
L8 3 S L4
L9 3 S L4/PREP

FILE 'REGISTRY' ENTERED AT 14:21:59 ON 16 JUL 2008

L10 50 S L1

FILE 'CA' ENTERED AT 14:22:36 ON 16 JUL 2008

S L1

FILE 'REGISTRY' ENTERED AT 14:22:38 ON 16 JUL 2008

L11 50 S L1

FILE 'CA' ENTERED AT 14:22:39 ON 16 JUL 2008

L12 49 S L11
L13 3056 S L5
L14 0 S L13 AND L8

FILE 'CASREACT' ENTERED AT 14:23:35 ON 16 JUL 2008

L15 0 S L2
L16 2 S L2 FULL
L17 0 S L3 FULL

FILE 'CA' ENTERED AT 14:25:15 ON 16 JUL 2008

L18 447 S L13 AND QUINOLIN?
L19 400 S PREP? AND L18

=> s l19 andpy<2002

MISSING OPERATOR L19 ANDPY<2002

The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s l19 and py<2002

21072993 PY<2002

L20 231 L19 AND PY<2002

=> d ibib abs fhitr 1-25

L20 ANSWER 1 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 136:112193 CA

TITLE: Synthesis and biological evaluations of
quinoline-based HMG-CoA reductase inhibitors

AUTHOR(S): Suzuki, M.; Iwasaki, H.; Fujikawa, Y.; Kitahara, M.;
Sakashita, M.; Sakoda, R.

CORPORATE SOURCE: Central Research Laboratories, Nissan Chemical
Industries, Ltd., Funabashi, Chiba, 274-8507, Japan

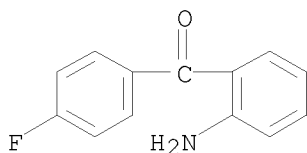
SOURCE: Bioorganic & Medicinal Chemistry (2001),
9(10), 2727-2743
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 136:112193

AB A series of quinoline-based 3,5-dihydroxyheptenoic acid derivs. were synthesized from quinolinecarboxylic acid esters by homologation, aldol condensation with Et acetoacetate dianion, and reduction of 3-hydroxyketone to evaluate their ability to inhibit the enzyme HMG-CoA reductase in vitro. In agreement with previous literature, a strict structural requirement exists on the external ring, and 4-fluorophenyl is the most active in this system. For the central ring, substitution on positions 6, 7, and 8 of the central quinoline nucleus moderately affected the potency, whereas the alkyl side chain on the 2-position had a more pronounced influence on activity. Among the derivs., NK-104 (pitavastatin calcium), which has a cyclopropyl group as the alkyl side chain, showed the greatest potency. We found that further modulation and improvement in potency at inhibiting HMG-CoA reductase was obtained by having the optimal substituents flanking the desmethylmevalonic acid portion, i.e., 4-fluorophenyl and cyclopropyl, instead of the usual iso-Pr group.

IT 3800-06-4, 2-Amino-4'-fluorobenzophenone
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis and biol. evaluations of quinoline-based HMG-CoA reductase inhibitors)

RN 3800-06-4 CA

CN Methanone, (2-aminophenyl)(4-fluorophenyl)- (CA INDEX NAME)



REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 2 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 136:37994 CA

TITLE: Highly fluorescent poly(arylene ethynylene)s containing quinoline and 3-alkyl thiophene

AUTHOR(S): Jegou, Gwenaeelle; Jenekhe, Samson A.

CORPORATE SOURCE: Department of Chemical Engineering and Department of Chemistry, University of Washington, Seattle, WA, 98195-1750, USA

SOURCE: Macromolecules (2001), 34(23), 7926-7928

CODEN: MAMOBX; ISSN: 0024-9297

PUBLISHER: American Chemical Society

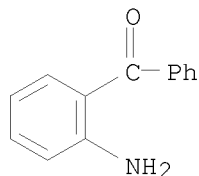
DOCUMENT TYPE: Journal

LANGUAGE: English

AB New monomers have been copolymd. with 2,5-dibromo-3-alkyl thiophene by palladium-catalyzed polycondensation. The resulting poly(arylene ethylene)s have a donor-acceptor architecture containing quinoline

and 3-alkyl thiophene moieties. These polymers combine very high fluorescence efficiency in the solid state with enhanced electrochem. redox properties compared to those of known polyquinoline and prior poly(arylene ethylene)s.

IT 2835-77-0, 2-Aminobenzophenone
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (monomer synthesis; highly fluorescent poly(arylene ethynylene)s containing quinoline and 3-alkyl thiophene)
 RN 2835-77-0 CA
 CN Methanone, (2-aminophenyl)phenyl- (CA INDEX NAME)

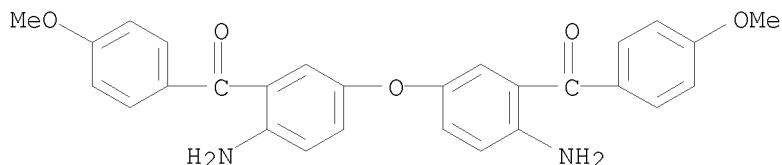


REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 231 CA COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 135:364410 CA
 TITLE: Excited-state intramolecular proton transfer in quinoline-cored dendritic molecules
 AUTHOR(S): Kim, Sehoon; Chang, Dong Wook; Park, Soo Young
 CORPORATE SOURCE: School of Materials Science and Engineering, Seoul National University, Seoul, 151-744, S. Korea
 SOURCE: Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (2001), 42(2), 387-388
 CODEN: ACPPAY; ISSN: 0032-3934
 PUBLISHER: American Chemical Society, Division of Polymer Chemistry
 DOCUMENT TYPE: Journal; (computer optical disk)
 LANGUAGE: English
 AB An excited-state intramol. proton transfer (ESIPT)-active quinoline-cored dendritic mols. consisting of Frechet's archetypal poly(aryl ether) were synthesized. The dendritic architecture was chosen to suppress the concentration quenching by steric isolation of ESIPT dye. Quinoline core and low mol. weight model compound (MQ) were prepared from bis(aminoketone) and OH-substituted ketomethylene. Frechet's dendrons GnBr (number of generation n = 1, 2) were obtained starting from the coupling of Me 3,5-dihydroxybenzoate with benzyl bromide. The coupling reactions between 3 and GnBr were performed in acetone in the presence of anhydrous K2CO3 and 18-crown-6 to give dendritic product QGn. All the quinoline compds., 3, MQ, and QGn, did not show any detectable fluorescence in solution. However, they showed orange fluorescence characteristic of ESIPT in solid phase. Comparison of the effect of dendritic structure on the QG2/polystyrene (PS) blend films with MQ/PS blend films show that the dendritic structure QG2 exhibits effective proton transfer and efficient keto emission in solid solution with a large dye content and even in pure QG2 film.
 IT 208345-46-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction with hydroxy-substituted ketomethylene in synthesis quinoline-cored dendritic mols.)

10/534,015

RN 208345-46-4 CA
CN Methanone, [oxybis(6-amino-3,1-phenylene)]bis[(4-methoxyphenyl)- (9CI)
(CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 4 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 135:358500 CA

TITLE: New Conjugated Polymers with Donor-Acceptor Architectures: Synthesis and Photophysics of Carbazole-Quinoline and Phenothiazine-Quinoline Copolymers and Oligomers Exhibiting Large Intramolecular Charge Transfer
AUTHOR(S): Jenekhe, Samson A.; Lu, Liangde; Alam, Maksudul M.
CORPORATE SOURCE: Departments of Chemical Engineering and Chemistry, University of Washington, Seattle, WA, 98195-1750, USA
SOURCE: Macromolecules (2001), 34(21), 7315-7324
CODEN: MAMOBX; ISSN: 0024-9297

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Alternating carbazole-quinoline and phenothiazine-quinoline donor-acceptor conjugated copolymers and a corresponding oligomer were synthesized, and their solution and solid-state photophysics were investigated. The new copolymers, poly(2,2'-9-methyl-3,6-carbazolylene-6,6'-bis(4-phenylquinoline)) and poly(2,2'-10-methyl-3,7-phenothiazylene-6,6'-bis(4-phenylquinoline)), had intrinsic viscosities of 11.2-22.0 dL/g, indicating very high mol. wts. The optical band gaps of the new copolymers were 2.35-2.64 eV, which are significantly smaller than the corresponding homopolymers. The absorption and emission spectra of the related donor-acceptor oligomers, 3,6-[bis(4-phenyl-2-quinolyl)]-9-methylcarbazole and 3,7-[bis(4-phenyl-2-quinolyl)]-10-methylphenothiazine, in solvents of varying polarity showed pos. solvatochromism. An unusual dual fluorescence, with a blue emission band at 454 nm and an orange emission band at 584 nm, was observed in solid films of the carbazole-linked oligomer and related to intramol. excitons and intermol. excimers. Solid-state emission from the phenothiazine oligomer and copolymer was from intramol. excitons with strong charge-transfer character. The red solid-state emission from the carbazole copolymer originated from intermol. excimers with dominant fluorescence lifetimes of 2-10 ns. The observed intramol. charge-transfer effects on photophysics and properties were larger in the phenothiazine-containing oligomer and copolymer than the corresponding carbazole-containing materials, reflecting the fact that phenothiazine is a stronger electron-donating unit. Preliminary results suggest that the oligomers and copolymers are useful for light-emitting and photovoltaic devices.

IT 372521-30-7P, 3,3'-Dibenzoylbenzidine-3,6-diacetyl-9-methylcarbazole copolymer

RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(preparation and photophysics of carbazole-quinoline and phenothiazine-quinoline copolymers for LED and photovoltaic device application)

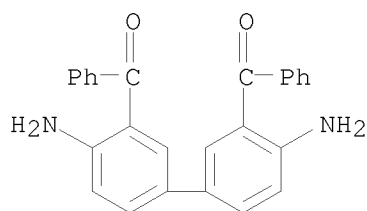
RN 372521-30-7 CA

CN Ethanone, 1,1'-(9-methyl-9H-carbazole-3,6-diyl)bis-, polymer with (4,4'-diamino[1,1'-biphenyl]-3,3'-diyl)bis[phenylmethanone] (9CI) (CA INDEX NAME)

CM 1

CRN 71713-10-5

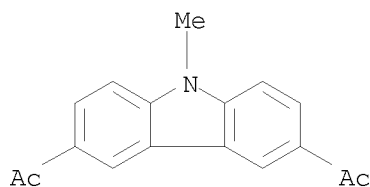
CMF C26 H20 N2 O2



CM 2

CRN 1483-98-3

CMF C17 H15 N O2



REFERENCE COUNT: 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 5 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 135:280107 CA

TITLE: Synthesis and characterization of quinoline-based copolymers for light emitting diodes

AUTHOR(S): Liu, Yunqi; Ma, Hong; Jen, Alex K.-Y.

CORPORATE SOURCE: Department of Materials Science and Engineering, University of Washington, Seattle, WA, 98195-2120, USA

SOURCE: Journal of Materials Chemistry (2001), 11(7), 1800-1804

CODEN: JMACEP; ISSN: 0959-9428

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Two new electroluminescent copolymers containing biquinolines and

2,2-diphenylhexafluoropropane (F-PQ) or pyridine (Py-PQE) moieties were prepared. They possess excellent thermal stability (decomposition temperature $>500^{\circ}$), good electrochem. reversibility in reduction reactions, and high electron affinity. The energy levels for HOMO and LUMO determined by cyclic voltammetry were -5.80 and -2.89 eV for F-PQ, and -5.88 and -2.66 eV for Py-PQE, resp. Elec. characterization of a double layer light emitting diode (LED) based on the structure of ITO/Cu phthalocyanine (CuPc)/F-PQ/Al showed good performance (a rectification ratio $>10^5$ and a low turn-on voltage of 6.2 V). A single layer LED fabricated with Py-PQE as an emitting layer and air-stable Al as a cathode exhibited a balanced injection/transport of hole and electron. A luminance of 94.0 cd m $^{-2}$ was observed from a double layer LED of ITO/CuPc/Py-PQE/Al at a c.d. of 141.4 mA cm $^{-2}$.

IT 59827-10-0P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and characterization of quinoline-based copolymers
for light emitting diodes)

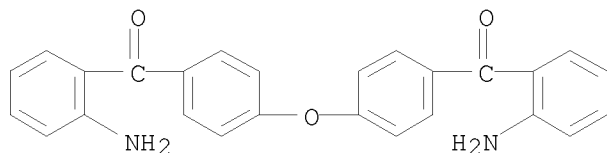
RN 59827-10-0 CA

CN Ethanone, 1,1'-(2,6-pyridinediyl)bis-, polymer with (oxydi-4,1-phenylene)bis[(2-aminophenyl)methanone] (9CI) (CA INDEX NAME)

CM 1

CRN 59827-06-4

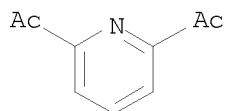
CMF C26 H20 N2 O3



CM 2

CRN 1129-30-2

CMF C9 H9 N O2



REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 6 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 135:61663 CA

TITLE: Processable Fully Aromatic Quinoline-Based Polymers

AUTHOR(S): Concilio, Simona; Pfister, Pascal M.; Tirelli, Nicola; Kocher, Christoph; Suter, Ulrich W.

CORPORATE SOURCE: Institute of Polymers Department of Materials, ETH, Zurich, CH-8092, Switz.

SOURCE: Macromolecules (2001), 34(11), 3607-3614
 CODEN: MAMOBX; ISSN: 0024-9297
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Quinoline-based homo- and copolymers have been synthesized by the acid-catalyzed Friedlaender condensation between bis(o-aminoketone)s and silicon-containing bis(ketomethylene) monomers. The polymers contain quaternary silicon atoms and are fully aromatic; they show improved solubility compared to known polyquinolines with approx. unchanged softening and decomposition temps. of the final material. A new solubilization method was developed for these materials. In addition two block copolymers based on an aramid block containing fluorene cardo units and polyquinoline were prepared

IT 345328-03-2P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (processable fully aromatic quinoline-based polymers)

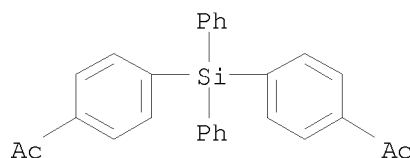
RN 345328-03-2 CA

CN Ethanone, 1,1'-[(diphenylsilylene)di-4,1-phenylene]bis-, polymer with [oxybis(6-amino-3,1-phenylene)]bis[phenylmethanone] (9CI) (CA INDEX NAME)

CM 1

CRN 110559-55-2

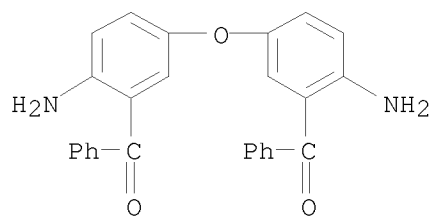
CMF C28 H24 O2 Si



CM 2

CRN 59827-14-4

CMF C26 H20 N2 O3



REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

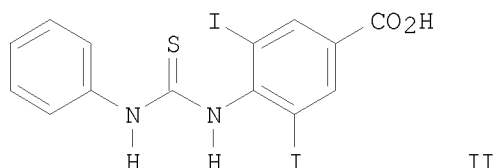
L20 ANSWER 7 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 134:340357 CA

TITLE: Novel compounds, specifically aromatic and heteroaromatic ureas and thioureas, useful against

INVENTOR(S): parasites and especially against coccidiosis.
 PATENT ASSIGNEE(S): Muzi, Sabrina; Abdul-Rahman, Shoaab
 SOURCE: New Pharma Research Sweden AB, Swed.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| WO 2001030749 | A1 | 20010503 | WO 2000-SE2091 | 20001027 <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1224165 | A1 | 20020724 | EP 2000-973336 | 20001027 |
| EP 1224165 | B1 | 20051214 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | | |
| AT 312815 | T | 20051215 | AT 2000-973336 | 20001027 |
| ES 2250208 | T3 | 20060416 | ES 2000-973336 | 20001027 |
| EP 1210950 | A1 | 20020605 | EP 2000-850205 | 20001204 |
| EP 1210950 | B1 | 20051019 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| AT 306940 | T | 20051115 | AT 2000-850205 | 20001204 |
| WO 2002045751 | A1 | 20020613 | WO 2001-SE2654 | 20011130 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2002024308 | A | 20020618 | AU 2002-24308 | 20011130 |
| US 6875764 | B1 | 20050405 | US 2002-111376 | 20020607 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | SE 1999-3894 | A 19991028 |
| | | | WO 2000-SE2091 | W 20001027 |
| | | | EP 2000-850205 | A 20001204 |
| | | | WO 2001-SE2654 | W 20011130 |
| OTHER SOURCE(S): MARPAT 134:340357 | | | | |
| GI | | | | |



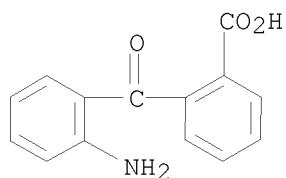
AB The invention relates to novel ureas and thioureas $R-C(:Y)-R$ [I; $Y = O$ or S ; R 's are selected from the pairings: (a) NHR_1 and NHR_2 , or (b) NR_3R_4 and NR_5R_6 , or (c) NR_3R_4 and cyclic radical $-N:Z-R_7$; R_1, R_2 = certain (un)substituted aryl, aralkyl, alkyl, heteroaryl, etc.; R_3-R_6 = certain (un)substituted aryl, aralkyl, or alkyl groups; Z = atoms to form ring; R_7 = electron-withdrawing substituent] and their tautomers, solvates, radiolabeled derivs., and pharmaceutically acceptable salts. Also disclosed are pharmaceutical compns. containing I, as well as a method for treatment of parasitic disorders using I. I are especially well-suited for treatment of coccidiosis, particularly in poultry. Over 200 compds. are listed, and several synthetic examples are given. For instance, reaction of $PhNCS$ with 4-amino-3,5-diiodobenzoic acid in refluxing acetone in the presence of aqueous 10% KOH gave 75% thiourea derivative II. This compound had an

anticoccidial effect in chickens similar to coxistac, but with a shorter duration of infection, reduced feed consumption, and no loss of growth rate.

IT 1147-43-9, 2-(2-Aminobenzoyl)benzoic acid
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (precursor; preparation of aromatic and heteroarom. ureas and thioureas as antiparasitic and anticoccidial agents)

RN 1147-43-9 CA

CN Benzoic acid, 2-(2-aminobenzoyl)- (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 8 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 134:131410 CA

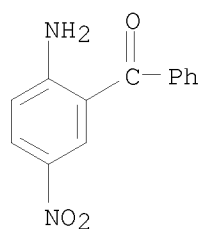
TITLE: Synthesis and characterization of new substituted terdentate 2,6-bis(2'-quinolinyl)pyridine and 1,3-bis(2'-quinolinyl)benzene ligands for transition metals

AUTHOR(S): Mamo, Antonino

CORPORATE SOURCE: Dipartimento Metodologie Fisiche e Chimiche per l'Ingegneria, Facolta di Ingegneria, Universita di Catania, Catania, 95125, Italy

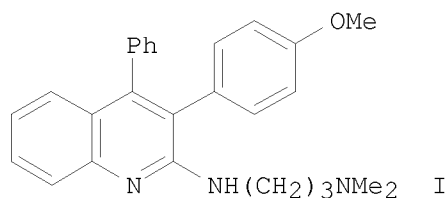
SOURCE: Journal of Heterocyclic Chemistry (2000), 37(5), 1225-1231

CODEN: JHTCAD; ISSN: 0022-152X
 PUBLISHER: HeteroCorporation
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 134:131410
 AB A series of N-N-N terdentate polypyridine-type ligands and their N-C-N cyclometalating homologues were synthesized and fully characterized (L1-L12). Complete assignments of the ¹H spectra of the various compds., accomplished by using a combination of 1D and 2D NMR, and ¹³C data are also reported.
 IT 1775-95-7, 2-Amino-5-nitrobenzophenone
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of terdentate bis(quinolinyl)pyridine and -benzene ligands)
 RN 1775-95-7 CA
 CN Methanone, (2-amino-5-nitrophenyl)phenyl- (CA INDEX NAME)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

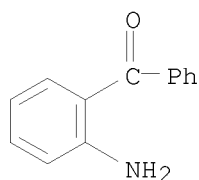
L20 ANSWER 9 OF 231 CA COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 134:100750 CA
 TITLE: Diphenyl quinolines and isoquinolines: synthesis and primary biological evaluation
 AUTHOR(S): Croisy-Delcey, Martine; Croisy, Alain; Carrez, Daniele; Huel, Christiane; Chiaroni, Angele; Ducrot, Pierre; Bisagni, Emile; Jin, Lu; Leclercq, Guy
 CORPORATE SOURCE: UMR 176 CNRS Institut Curie-Recherche, Laboratoire Raymond Latarjet, UMR 176 CNRS Institut Curie-Recherche, Laboratoire Raymond Latarjet, Centre Universitaire, Orsay, 91405, Fr.
 SOURCE: Bioorganic & Medicinal Chemistry (2000), 8(11), 2629-2641
 CODEN: BMECEP; ISSN: 0968-0896
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 134:100750
 GI



AB The synthesis of a series of 35 substituted 3,4-di-phenylquinolines and -isoquinolines is described. The majority of these mols. differ from all other triphenylethylene based antiestrogens by a different spatial location of the aminoalkyl side chain. The binding affinity of the most representative mols., including analogs without the side chain, for the estrogen receptor α (ER) was determined. The ability of these mols. to induce the progesterone receptor was also studied. Antiproliferative activity was evaluated on MCF-7 human breast cancer cells, while intrinsic cytotoxic/cytostatic properties resulting from interaction with other targets than ER were assayed on L1210 murine leukemia cells. Introduction of an aminoalkylamino side chain at carbon 2 confers strong cytotoxic properties to diphenylquinolines as well as pure antiestrogenic activities. However, cytotoxicity is so high with respect to antiestrogenicity that the latter was clearly observable only in one case (I). The structure of I was determined by X-ray crystallog. Mol. modeling of its docking within the hormone-binding domain of the receptor was subsequently undertaken. According to these results, the design of mols. with the side chain bound to the ethylene part of the tri-phenylethylene skeleton might generate compds. of potential pharmacol. interest.

IT 2835-77-0, 2-Aminobenzophenone
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation and cytotoxicity and antiestrogenic activity of diphenylquinolines and -isoquinolines)

RN 2835-77-0 CA
 CN Methanone, (2-aminophenyl)phenyl- (CA INDEX NAME)



REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 10 OF 231 CA COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 133:310142 CA
 TITLE: Synthesis, activity and formulations of pharmaceutical compounds for treatment of oxidative stress and/or endothelial dysfunction
 INVENTOR(S): Del Soldato, Piero
 PATENT ASSIGNEE(S): Nicox S.A., Fr.
 SOURCE: PCT Int. Appl., 159 pp.
 CODEN: PIXXD2

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| WO 2000061537 | A2 | 20001019 | WO 2000-EP3234 | 20000411 <-- |
| WO 2000061537 | A3 | 20010927 | | |
| W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, DM, EE, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| IT 1311924 | B1 | 20020320 | IT 1999-MI753 | 19990413 |
| CA 2370412 | A1 | 20001019 | CA 2000-2370412 | 20000411 <-- |
| BR 2000009702 | A | 20020108 | BR 2000-9702 | 20000411 |
| EP 1169294 | A2 | 20020109 | EP 2000-925203 | 20000411 |
| EP 1169294 | B1 | 20071205 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY | | | | |
| JP 2002541233 | T | 20021203 | JP 2000-610814 | 20000411 |
| HU 2002003378 | A2 | 20030128 | HU 2002-3378 | 20000411 |
| HU 2002003378 | A3 | 20040728 | | |
| NZ 514267 | A | 20040625 | NZ 2000-514267 | 20000411 |
| RU 2237657 | C2 | 20041010 | RU 2001-127576 | 20000411 |
| AU 778989 | B2 | 20041223 | AU 2000-44001 | 20000411 |
| AT 380170 | T | 20071215 | AT 2000-925203 | 20000411 |
| ES 2296616 | T3 | 20080501 | ES 2000-925203 | 20000411 |
| ZA 2001008127 | A | 20030103 | ZA 2001-8127 | 20011003 |
| MX 2001PA10210 | A | 20020918 | MX 2001-PA10210 | 20011009 |
| NO 2001004927 | A | 20011213 | NO 2001-4927 | 20011010 <-- |
| US 6869974 | B1 | 20050322 | US 2001-926326 | 20011015 |
| US 20050261242 | A1 | 20051124 | US 2004-24857 | 20041230 |
| US 7378412 | B2 | 20080527 | | |
| PRIORITY APPLN. INFO.: | | | IT 1999-MI753 | A 19990413 |
| | | | WO 2000-EP3234 | W 20000411 |
| | | | US 2001-926326 | A3 20011015 |

OTHER SOURCE(S): MARPAT 133:310142

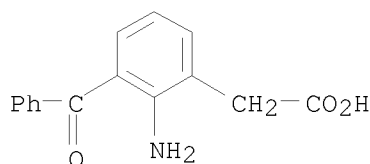
AB Compds. A-B-C-N(O)s and A-C1[N(O)s]-B1 or their salts [s is an integer 1 or 2, preferably s = 2; A is the radical of a drug and is such as to meet the pharmacol. tests reported in the description; C and C1 are two bivalent radicals; the precursors of the radicals B and B1 are such as to meet the pharmacol. test reported in the description] were prepd . for use as pharmaceuticals. Thus, (S,S)-N-acetyl-S-(6-methoxy- α -methyl-2-naphthalenylacetyl)cysteine 4-nitroxybutyl ester was prepared (NCX 2101) from naproxene and N-acetylcysteine in the first of 28 synthetic examples given. Pharmacol. test examples and tabular data are also given.

IT 51579-82-9, Amfenac

RL: RCT (Reactant); RACT (Reactant or reagent)
 (drug precursor)

RN 51579-82-9 CA

CN Benzeneacetic acid, 2-amino-3-benzoyl- (CA INDEX NAME)



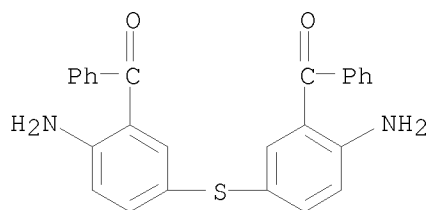
L20 ANSWER 11 OF 231 CA COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 133:193562 CA
 TITLE: New polyquinoline copolymers: synthesis, optical, luminescent, and hole-blocking/electron-transporting properties
 AUTHOR(S): Kim, Jong Lae; Kim, Jai Kyeong; Cho, Hyun Nam; Kim, Dong Young; Kim, Chung Yup; Hong, Sung Il
 CORPORATE SOURCE: Department of Fiber Polymer Science, Seoul National University, Seoul, 151-742, S. Korea
 SOURCE: Macromolecules (2000), 33(16), 5880-5885
 CODEN: MAMOBX; ISSN: 0024-9297
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB A series of polyquinolines containing the 9,9-dihexylfluorene unit in the main chain were synthesized via Friedlaender quinoline synthesis in good yields. The thermal, optical, luminescent, electrochem., and hole-blocking/electron-transporting properties of these polyquinolines were examined. The glass transition temps. were in the range 195-243°C, and these polyquinolines had initial decomposition temps. of >388°C. Their optical and luminescent properties varied with the chain rigidity and conjugation length. Cyclic voltammetry studies reveal that these polyquinolines undergo irreversible oxidation onset around -6.0 eV, and their LUMO level ranged from -2.78 to -3.21 eV. The application of two of these polyquinolines as a hole-blocking/electron-transporting layer in polymeric LEDs was demonstrated.

IT 106500-65-6P, 4,4'-Diamino-3,3'-dibenzoyldiphenyl sulfide
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (monomer; preparation and optical, luminescent and hole-blocking/electron-transporting properties of)

RN 106500-65-6 CA

CN Methanone, [thiobis(6-amino-3,1-phenylene)]bis[phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

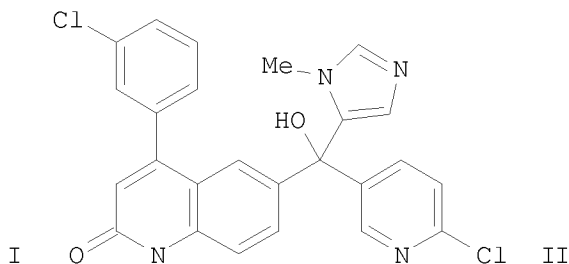
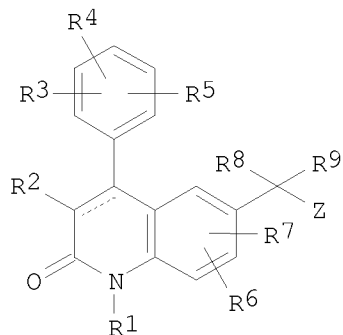
L20 ANSWER 12 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 133:177111 CA
 TITLE: Preparation of heteroaryl-substituted
 quinolin-2-ones as anticancer agents
 INVENTOR(S): Yang, Bingwei Vera
 PATENT ASSIGNEE(S): Pfizer Products Inc., USA
 SOURCE: PCT Int. Appl., 106 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| WO 2000047574 | A1 | 20000817 | WO 2000-IB121 | 20000204 <-- |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2362394 | A1 | 20000817 | CA 2000-2362394 | 20000204 <-- |
| CA 2362394 | C | 20060117 | | |
| EP 1150973 | A1 | 20011107 | EP 2000-901292 | 20000204 <-- |
| EP 1150973 | B1 | 20050615 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| TR 200102315 | T2 | 20011221 | TR 2001-2315 | 20000204 <-- |
| BR 2000008202 | A | 20020219 | BR 2000-8202 | 20000204 |
| HU 2001005231 | A2 | 20020429 | HU 2001-5231 | 20000204 |
| HU 2001005231 | A3 | 20030128 | | |
| TR 200201297 | T2 | 20020621 | TR 2002-1297 | 20000204 |
| TR 200201296 | T2 | 20020722 | TR 2002-1296 | 20000204 |
| JP 2002536444 | T | 20021029 | JP 2000-598494 | 20000204 |
| JP 4090200 | B2 | 20080528 | | |
| EE 200100425 | A | 20021216 | EE 2001-425 | 20000204 |
| AT 297916 | T | 20050715 | AT 2000-901292 | 20000204 |
| ES 2243228 | T3 | 20051201 | ES 2000-901292 | 20000204 |
| US 6258824 | B1 | 20010710 | US 2000-501163 | 20000209 <-- |
| IN 2000MU00124 | A | 20050304 | IN 2000-MU124 | 20000210 |
| US 20020019530 | A1 | 20020214 | US 2001-836026 | 20010417 |
| US 6388092 | B2 | 20020514 | | |
| HR 2001000574 | A1 | 20021231 | HR 2001-574 | 20010730 |
| ZA 2001006520 | A | 20020826 | ZA 2001-6520 | 20010808 |
| NO 2001003909 | A | 20011008 | NO 2001-3909 | 20010810 <-- |
| MX 2001PA08154 | A | 20011127 | MX 2001-PA8154 | 20010810 <-- |
| BG 105860 | A | 20020329 | BG 2001-105860 | 20010830 |
| US 20020120145 | A1 | 20020829 | US 2002-92744 | 20020307 |
| US 6710209 | B2 | 20040323 | | |
| JP 2004182741 | A | 20040702 | JP 2004-29709 | 20040205 |
| JP 2005002124 | A | 20050106 | JP 2004-211298 | 20040720 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 1999-119702P | P 19990211 |
| | | | JP 2000-598494 | A3 20000204 |
| | | | WO 2000-IB121 | W 20000204 |
| | | | US 2000-501163 | A3 20000209 |

OTHER SOURCE(S):
GI

MARPAT 133:177111



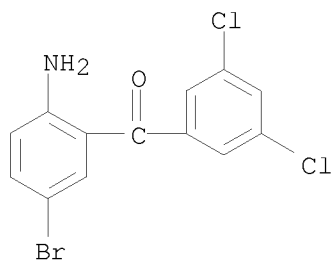
AB The title compds. [I; R1 = H, alkyl, etc.; R2 = halo, CN, CO2H, etc.; R3-R7 = H, alkyl, alkenyl, etc.; Z = (un)substituted aromatic 4-10 membered heterocyclyl; R8 = H, OH, CN, etc.; R9 = (un)substituted methyl(imidazolyl), methyl(pyridinyl)], useful for inhibiting abnormal cell growth, including cancer, were prepared E.g., a multi-step synthesis of quinolin-2-one II, was given. Exemplified compds. I showed IC50 of ≤ 500 nM against human farnesyl transferase in vitro.

IT 288392-11-0

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of heteroaryl-substituted quinolin-2-ones
as anticancer agents)

RN 288392-11-0 CA

CN Methanone, (2-amino-5-bromophenyl)(3,5-dichlorophenyl)- (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 13 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 133:120759 CA

TITLE: Supramolecular Self-Assembly of Three-Dimensional Nanostructures and Microstructures: Microcapsules from Electroactive and Photoactive Rod-Coil-Rod Triblock Copolymers

AUTHOR(S): Chen, X. Linda; Jenekhe, Samson A.

CORPORATE SOURCE: Department of Chemical Engineering, University of

SOURCE: Rochester, Rochester, NY, 14627-0166, USA
 Macromolecules (2000), 33(13), 4610-4612
 CODEN: MAMOBX; ISSN: 0024-9297
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The synthesis and supramol. self-assembly were carried out of a rod (A)-coil (B)-rod (A) triblock copolymer architecture with the general structure A-NHCO-B-CONH-A. Quinoline-styrene-quinoline (QSQ) triblock copolymers spontaneously form robust microcapsules or spherical vesicles in solution. Polarized optical, fluorescence optical, and scanning electron microscopies were used to study the supramol. morphol. About 5-10% of the QSQ-1 and QSQ-2 assemblies observed in the SEM had diameter of 200-800 nm, suggesting that the folded conformations of QSQ-1 and QSQ-2 are the building blocks for the self-assembly of at least the small-diameter (<800 nm) microcapsules.

IT 244014-66-2P, 5-Acetyl-2-aminobenzophenone-styrene block copolymer
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
 (triblock, rod-coil-rod; preparation and supramol. self-assembly of microcapsules from electroactive and photoactive rod-coil-rod acetyl-aminobenzophenone-styrene triblock copolymers)

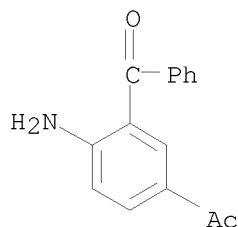
RN 244014-66-2 CA

CN Ethanone, 1-(4-amino-3-benzoylphenyl)-, polymer with ethenylbenzene, block (9CI) (CA INDEX NAME)

CM 1

CRN 37104-17-9

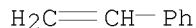
CMF C15 H13 N O2



CM 2

CRN 100-42-5

CMF C8 H8



REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 14 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 133:105868 CA

TITLE: Polyquinolines: multifunctional polymers for electro-optic and light-emitting applications

AUTHOR(S): Jen, Alex K.-Y.; Ma, Hong
 CORPORATE SOURCE: Department of Chemistry, Northeastern University,
 Boston, MA, 02115, USA
 SOURCE: Materials Research Society Symposium Proceedings (2000), 558(Flat-Panel Displays and
 Sensors--Principles, Materials and Processes), 469-480
 CODEN: MRSPDH; ISSN: 0272-9172
 PUBLISHER: Materials Research Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB A versatile, and generally applicable modular approach for making second-order nonlinear optical (NLO) side-chain aromatic polyquinolines has been developed. This approach emphasizes the ease of incorporating NLO chromophores onto the pendent Ph moieties of parent polyquinolines at the final stage via mild Mitsunobu reaction. This method provides the synthesis of polyquinolines with a broad variation of the polymer backbones and great flexibility in the selection of NLO chromophores. These side-chain NLO polyquinolines demonstrate high electro-optic (E-O) activity (up to 35 pm/V at 830 nm and 22 pm/V at 1300 nm, resp.) and a good combination of thermal, optical, elec. and mech. properties. Comparatively, two new electroluminescent (EL) polyquinolines have been prepared via the Friedlander condensation and nucleophilic reaction. The resulting polymers contain a bipolar property with both an efficient hole-transporting moiety, tetraphenyldiaminobiphenyl (TPD), and an electron affinitive light-emitting moiety, bis-quinoline. In addition, they possess high thermal stability, excellent electrochem. reversibility, good thin film-forming ability, and bright light-emitting property. Elec. characterization of two-layer diode devices based on the configurations of ITO/CuPc/TPD-PQ or TPD-PQE/Al showed excellent electroluminescence performance (a rectification ratio greater than 10⁵ and a low turn-on voltage of less than 4 V).

IT 213814-56-3P
 RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (preparation and characterization and applications of multifunctional polyquinolines for electrooptic and light-emitting devices)

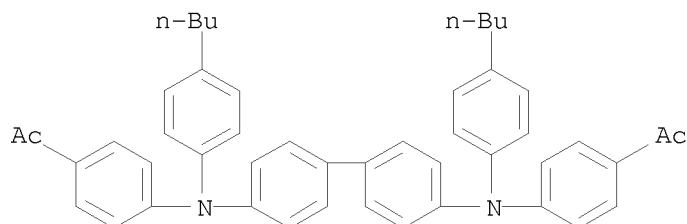
RN 213814-56-3 CA

CN Methanone, (4,4'-diamino[1,1'-biphenyl]-3,3'-diyl)bis[phenyl-, polymer with [[1,1'-biphenyl]-4,4'-diylbis[[4-butylphenyl)imino]-4,1-phenylene]]bis[methylmethanone] (9CI) (CA INDEX NAME)

CM 1

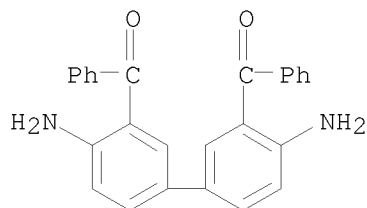
CRN 213814-55-2

CMF C48 H48 N2 O2



CM 2

CRN 71713-10-5
CMF C26 H20 N2 O2



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 15 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 133:74022 CA

TITLE: Preparation of 1,2-annelated quinoline derivatives as farnesyl transferase and geranylgeranyl transferase inhibitors for use as antitumor agents.

INVENTOR(S): Angibaud, Patrick Rene; Venet, Marc Gaston; Bourdrez, Xavier Marc

PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.

SOURCE: PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

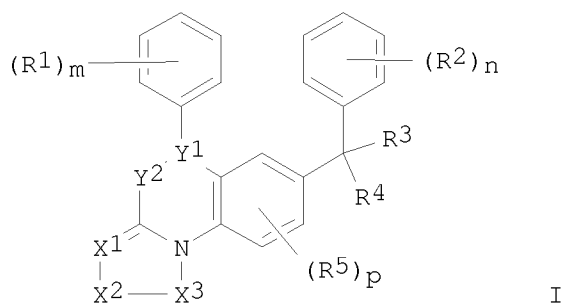
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|--------------|
| WO 2000039082 | A2 | 20000706 | WO 1999-EP10214 | 19991217 <-- |
| WO 2000039082 | A3 | 20001026 | | |
| W: | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | |
| RW: | GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2355717 | A1 | 20000706 | CA 1999-2355717 | 19991217 <-- |
| EP 1140935 | A2 | 20011010 | EP 1999-969220 | 19991217 <-- |
| EP 1140935 | B1 | 20030514 | | |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | |
| BR 9916827 | A | 20011016 | BR 1999-16827 | 19991217 <-- |
| TR 200101961 | T2 | 20011221 | TR 2001-1961 | 19991217 <-- |
| HU 2001004582 | A2 | 20020429 | HU 2001-4582 | 19991217 |
| HU 2001004582 | A3 | 20021228 | | |
| JP 2002533435 | T | 20021008 | JP 2000-590995 | 19991217 |
| EE 200100318 | A | 20021015 | EE 2001-318 | 19991217 |

| | | | | |
|------------------------|--------|-----------|------------------|--------------|
| EE 4962 | B1 | 20080215 | | |
| TW 531533 | B | 20030511 | TW 1999-88122193 | 19991217 |
| AT 240327 | T | 20030515 | AT 1999-969220 | 19991217 |
| AU 765437 | B2 | 20030918 | AU 2000-27953 | 19991217 |
| PT 1140935 | T | 20031031 | PT 1999-969220 | 19991217 |
| ES 2200591 | T3 | 20040301 | ES 1999-969220 | 19991217 |
| SK 286072 | B6 | 20080205 | SK 2001-873 | 19991217 |
| IN 2001MN00557 | A | 20050304 | IN 2001-MN557 | 20010515 |
| HR 2001000454 | A1 | 20020630 | HR 2001-454 | 20010615 |
| HR 2001000454 | B1 | 20040630 | | |
| BG 105631 | A | 20020228 | BG 2001-105631 | 20010620 |
| BG 65124 | B1 | 20070330 | | |
| NO 2001003088 | A | 20010621 | NO 2001-3088 | 20010621 <-- |
| NO 318922 | B1 | 20050523 | | |
| ZA 2001005136 | A | 20020621 | ZA 2001-5136 | 20010621 |
| MX 2001PA06614 | A | 20011203 | MX 2001-PA6614 | 20010626 <-- |
| US 6458800 | B1 | 20021001 | US 2001-868992 | 20010829 |
| HK 1038746 | A1 | 20030905 | HK 2002-100160 | 20020110 |
| US 20030119843 | A1 | 20030626 | US 2002-179444 | 20020624 |
| US 6914066 | B2 | 20050705 | | |
| KR 818541 | B1 | 20080402 | KR 2006-721243 | 20061012 |
| PRIORITY APPLN. INFO.: | | | EP 1998-204444 | A 19981223 |
| | | | WO 1999-EP10214 | W 19991217 |
| | | | KR 2001-706140 | A3 20010515 |
| | | | US 2001-868992 | A3 20010829 |
| OTHER SOURCE(S): | MARPAT | 133:74022 | | |
| GI | | | | |



AB This invention concerns the preparation, compns. containing and use as a medicine of compds. (I), the pharmaceutically acceptable acid addition salts and the stereochem. isomeric forms thereof, having farnesyl transferase and geranylgeranyl transferase inhibiting activity, wherein =X1-X2-X3- is a trivalent radical; >Y1-Y2- is a trivalent radical; m and n are each independently 0, 1, 2, 3, 4 or 5; p is 0, 1, 2 or 3. Each R1 and R2 are independently hydroxy, halo, cyano, C1-6alkyl, trihalomethyl, trihalomethoxy, C2-6alkenyl, C1-6alkyloxy, hydroxyC1-6alkyloxy, C1-6alkylthio, C1-6alkyloxyC1-6alkyloxy, C1-6alkyloxycarbonyl, aminoC1-6alkyloxy, mono- or di(C1-6alkyl)amino, mono- or di(C1-6alkyl)aminoC1-6alkyloxy, aryl, arylC1-6alkyl, aryloxy or arylC1-6alkyloxy, hydroxycarbonyl, C1-6alkyloxycarbonyl; or two R1 or R2

on adjacent positions form together a bivalent radical. R3 is hydrogen, halo, C1-6alkyl, cyano, haloC1-6alkyl, hydroxyC1-6alkyl, cyanoC1-6alkyl, aminoC1-6alkyl, C1-6alkyloxyC1-6alkyl, C1-6alkylthio-C1-6alkyl, aminocarbonylC1-6alkyl, hydroxycarbonyl, hydroxycarbonylC1-6alkyl, C1-6alkyloxycarbonylC1-6alkyl, C1-6alkylcarbonylC1-6alkyl, C1-6alkyloxycarbonyl, aryl, arylC1-6alkyloxyC1-6alkyl, mono- or di(C1-6alkyl)aminoC1-6alkyl, or a radical of formula -O-R10, -S-R10 or -NR11R12, aryl is an optionally substituted Ph or naphthalenyl. R4 is an optionally substituted imidazolyl. Thus, (±)-7-[(4-fluorophenyl)(1H-imidazol-1-yl)methyl]-5-phenylimidazo[1,2-a]quinoline ethanedioate (2:3) was prepared in three steps from (±)-6-[(4-fluorophenyl)(1H-imidazol-1-yl)methyl]-4-phenyl-2(1H)-quinoline in 99%, 83% and 30% yields for the three steps of the preparation

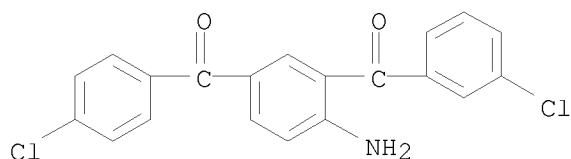
IT 190898-78-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate product in preparation of 1,2-annelated quinoline derivs. as farnesyl transferase and geranylgeranyl transferase inhibitors for use as antitumor agents.)

RN 190898-78-3 CA

CN Methanone, [2-amino-5-(4-chlorobenzoyl)phenyl](3-chlorophenyl)- (9CI) (CA INDEX NAME)



L20 ANSWER 16 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 133:43452 CA

TITLE: Preparation of 3-substituted-4-arylquinolin-2-one derivatives as calcium-activated potassium (BK) channel openers

INVENTOR(S): Hewawasam, Piyasena; Starrett, John E., Jr.

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 88 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

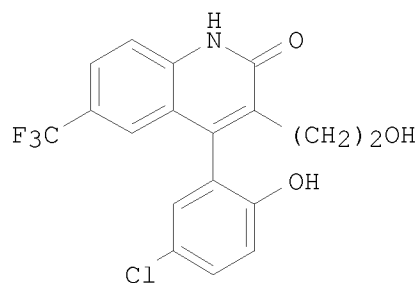
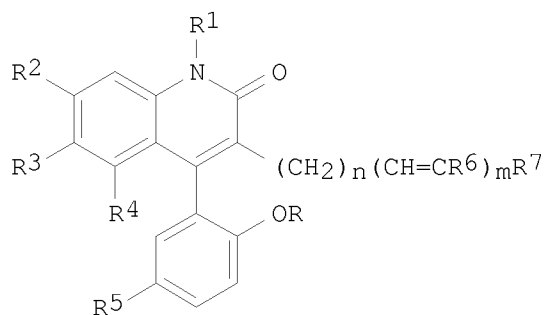
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|--------------|
| WO 2000034244 | A1 | 20000615 | WO 1999-US28428 | 19991201 <-- |
| W: | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW | | | |
| RW: | GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, | | | |

CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

| | | | | |
|---|----|----------|------------------|--------------|
| US 6184231 | B1 | 20010206 | US 1999-452523 | 19991201 <-- |
| BR 9915744 | A | 20010821 | BR 1999-15744 | 19991201 <-- |
| EP 1133474 | A1 | 20010919 | EP 1999-960636 | 19991201 <-- |
| EP 1133474 | B1 | 20070221 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY | | | | |
| TR 200101339 | T2 | 20020221 | TR 2001-1339 | 19991201 |
| JP 2002531549 | T | 20020924 | JP 2000-586692 | 19991201 |
| HU 2002001613 | A2 | 20020928 | HU 2002-1613 | 19991201 |
| HU 2002001613 | A3 | 20030328 | | |
| AU 755202 | B2 | 20021205 | AU 2000-17491 | 19991201 |
| CN 1129582 | B | 20031203 | CN 1999-813902 | 19991201 |
| NZ 510987 | A | 20040227 | NZ 1999-510987 | 19991201 |
| RU 2240998 | C2 | 20041127 | RU 2001-115714 | 19991201 |
| AT 354569 | T | 20070315 | AT 1999-960636 | 19991201 |
| ES 2281975 | T3 | 20071001 | ES 1999-960636 | 19991201 |
| TW 495504 | B | 20020721 | TW 1999-88121090 | 19991202 |
| IN 2001MN00460 | A | 20050304 | IN 2001-MN460 | 20010426 |
| ZA 2001004455 | A | 20020530 | ZA 2001-4455 | 20010530 |
| NO 2001002739 | A | 20010601 | NO 2001-2739 | 20010601 <-- |
| NO 318897 | B1 | 20050518 | | |
| MX 2001PA05532 | A | 20011101 | MX 2001-PA5532 | 20010601 <-- |
| PRIORITY APPLN. INFO.: | | | US 1998-111079P | P 19981204 |
| OTHER SOURCE(S): | | | WO 1999-US28428 | W 19991201 |
| GI | | | | |
| MARPAT 133:43452 | | | | |



AB The title compds. (I) [wherein R and R1 = independently H or Me; R2, R3, and R4 = independently H, halogen, NO2, or CF3; R5 = Br, Cl, or NO2; R6 = H or F; R7 = Me, CRR1OH, CHO, C:NOH, COMe, or (un)substituted aryl; m =

0-1; n = 0-6] were prepared by cyclization and further reaction of 1-[2-(acylamino)phenyl]-1-phenylmethanone derivs. For example, 4-(5-chloro-2-hydroxyphenyl)-3-(2-hydroxyethyl)-6-(trifluoromethyl)-2(1H)-quinoline (II) was synthesized in a 5-step sequence starting with acylation of 1-[2-amino-5-(trifluoromethyl)phenyl]-1'-(5-chloro-2-methoxyphenyl)methanone (preparation given) with 3-carbomethoxypropionyl chloride (82%). Subsequent cyclization (100%), dehydration (78%), demethylation (86%), and reduction of the acid yielded II. II activated the cloned BK channel mSlo expressed in *Xenopus* oocytes, increasing whole cell outward (K⁺) BK-mediated currents > 200% at 20 μ M. In an in vivo erectile function test on diabetic F-344 rats, II (0.1-1 mg/kg) significantly augmented intracavernous pressure/BP responses elicited by submaximal stimulation of the cavernous nerve. As BK channel openers, I are useful in the treatment of disorders which are responsive to the opening of the potassium channels, such as ischemia, stroke, convulsions, epilepsy, asthma, irritable bowel syndrome, migraine, traumatic brain injury, spinal cord injury, sexual dysfunction, and urinary incontinence.

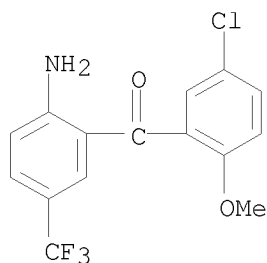
IT 221113-32-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 3-substituted-4-arylquinolin-2-one potassium channel openers by cyclization and further reaction of 1-[2-(acylamino)phenyl]-1-phenylmethanone derivs.)

RN 221113-32-2 CA

CN Methanone, [2-amino-5-(trifluoromethyl)phenyl] (5-chloro-2-methoxyphenyl)- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 17 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 132:279103 CA

TITLE: Ring expansion of 2-alkylidenedihydroquinolines to

2-iminodihydro-1-benzazepines by phenyl,

methanesulfonyl, and trifluoromethanesulfonyl azide

AUTHOR(S): Quast, Helmut; Ivanova, Svetlana; Peters, Eva-Maria; Peters, Karl

CORPORATE SOURCE: Institut für Organische Chemie der Universität Würzburg, Würzburg, D-97074, Germany

SOURCE: European Journal of Organic Chemistry (2000), (3), 507-520

CODEN: EJOCFK; ISSN: 1434-193X

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 132:279103

AB 2-Alkyl-1-methylquinolinium hexafluorophosphates are deprotonated by sodium or potassium hydride to afford solns. of 2-alkylidenedihydroquinolines, which are investigated by NMR spectroscopy. 1,3-Dipolar cycloaddn. of Ph azide to the latter yields spirocyclic products. Irradiation with light of $\lambda > 320$ nm results in the formation of similar amts. of ring expansion and [3 + 2] cycloreversion products. Trapping of 2-alkylidenedihydroquinolines by methanesulfonyl azide gives mixts. of the products of ring expansion and [3 + 2] cycloreversion of the apparently very labile intermediate spirocyclic cycloadducts. The ratio of ring expansion vs. cycloreversion is significantly improved in the case of trifluoromethanesulfonyl azide, which affords iminodihydrobenzazepines in 50-75% yield.

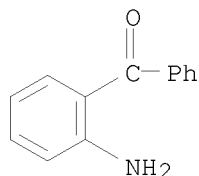
IT 2835-77-0, 2-Aminobenzophenone

RL: RCT (Reactant); RACT (Reactant or reagent)

(ring expansion of alkylidenedihydroquinolines by reaction with Ph, methanesulfonyl, and trifluoromethanesulfonyl azide)

RN 2835-77-0 CA

CN Methanone, (2-aminophenyl)phenyl- (CA INDEX NAME)



REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 18 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 132:180501 CA

TITLE: Microwave assisted Friedlaender condensation catalyzed by clay

AUTHOR(S): Sabitha, Gowravaram; Babu, R. Satheesh; Reddy, B. V. Subba; Yadav, J. S.

CORPORATE SOURCE: Organic Division I, Discovery Laboratory, Indian Institute of Chemical Technology, Hyderabad, 500 007, India

SOURCE: Synthetic Communications (1999), 29(24), 4403-4408

CODEN: SYNCAV; ISSN: 0039-7911

PUBLISHER: Marcel Dekker, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 132:180501

AB Clay catalyzed Friedlaender condensation of 2-aminoarenecarboxaldehyde or ketones with carbonyl compds. containing an α -methylene group was achieved in solvent free condition under microwave irradiation to give polycyclic quinoline derivs.

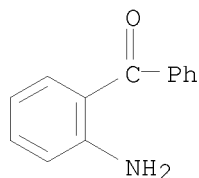
IT 2835-77-0, 2-Aminobenzophenone

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of polycyclic quinolines by microwave assisted Friedlaender condensations catalyzed by clay)

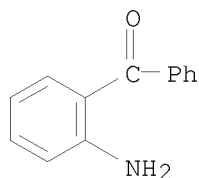
RN 2835-77-0 CA

CN Methanone, (2-aminophenyl)phenyl- (CA INDEX NAME)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 19 OF 231 CA COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 132:107730 CA
 TITLE: Ruthenium-catalyzed intermolecular hydroamination of terminal alkynes with anilines: a practical synthesis of aromatic ketimines
 AUTHOR(S): Tokunaga, Makoto; Eckert, Markus; Wakatsuki, Yasuo
 CORPORATE SOURCE: The Institute of Physical and Chemical Research (RIKEN), Wako, 351-0198, Japan
 SOURCE: Angewandte Chemie, International Edition (1999), 38(21), 3222-3225
 CODEN: ACIEF5; ISSN: 1433-7851
 PUBLISHER: Wiley-VCH Verlag GmbH
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 132:107730
 AB Aromatic ketimines were prepared by regioselective hydroamination of terminal alkynes CH.tplbond.CR1 (R1 = Ph, n-C6H13, CH2OMe) with anilines in presence of Ru3(CO)12 and an additive such as NH4PF3, HBF4, etc. A solvent-free system exhibited the highest reaction rate. Also, quinolines were prepared by reaction of 2-H2NC6H4COR (R = Ph, Me) with PhC.tplbond.CH.
 IT 2835-77-0, 2-Aminobenzophenone
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (ruthenium-catalyzed intermol. hydroamination of terminal alkynes with anilines)
 RN 2835-77-0 CA
 CN Methanone, (2-aminophenyl)phenyl- (CA INDEX NAME)



REFERENCE COUNT: 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 20 OF 231 CA COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 132:64531 CA
 TITLE: Preparation of cyclic amino acid compounds for inhibiting β -amyloid peptide release and/or its synthesis
 INVENTOR(S): Audia, James E.; Dressman, Bruce A.; Shi, Qing

PATENT ASSIGNEE(S): Elan Pharmaceuticals, Inc., USA; Eli Lilly & Company
 SOURCE: PCT Int. Appl., 256 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| WO 9966934 | A1 | 19991229 | WO 1999-US14211 | 19990622 <-- |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2324475 | A1 | 19991229 | CA 1999-2324475 | 19990622 <-- |
| AU 9947104 | A | 20000110 | AU 1999-47104 | 19990622 <-- |
| EP 1093372 | A1 | 20010425 | EP 1999-930600 | 19990622 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| JP 2002518451 | T | 20020625 | JP 2000-555620 | 19990622 |
| US 20050192265 | A1 | 20050901 | US 2004-2922 | 20041203 |
| PRIORITY APPLN. INFO.: | | | US 1998-102507 | A2 19980622 |
| | | | US 1998-164451 | A2 19980930 |
| | | | WO 1999-US14211 | W 19990622 |
| | | | US 2003-392332 | A3 20030320 |

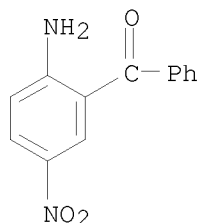
OTHER SOURCE(S): MARPAT 132:64531

AB Compds. R'R'NCH₂CONH(Y)nW and R':NC(:R1)CONH(Y)nW [W is a fused ring system, e.g., benzo- or dibenzoazepinones or -diazepinones; Y = CHR₂CONH, where R₂ = (un)substituted alkyl, alkenyl, or alkynyl, cycloalkyl, aryl, heteroaryl, heterocyclyl; R₁ and R' form a nitrogen-containing heterocycle; R'' = H, alkyl, substituted alkyl, aryl; n = 1 or 2] were prepared for inhibition of β -amyloid peptide release and/or its synthesis. Thus, 5-(S)-[N'-(L-prolyl)-L-alaninyl]amino-7-methyl-5,7-dihydro-6H-dibenz[b,d]azepin-6-one was prepared via coupling of N-(N'-tert-butoxycarbonyl-L-prolyl)-L-alanine with 5-(S)-amino-7-methyl-5,7-dihydro-6H-dibenz[b,d]azepin-6-one. Compds. of the invention inhibit β -amyloid peptide production by at least 30% as compared to the control when employed at 10 μ g/mL.

IT 1775-95-7, 2-Amino-5-nitrobenzophenone
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of cyclic amino acid compds. for inhibiting β -amyloid peptide release)

RN 1775-95-7 CA

CN Methanone, (2-amino-5-nitrophenyl)phenyl- (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 21 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 132:50564 CA

TITLE: Enhancement of Fluorescent Intensities of Poly(quinoline)s in Solution and in the Solid State

AUTHOR(S): Huang, W. Y.; Yun, H.; Lin, H. S.; Kwei, T. K.; Okamoto, Y.

CORPORATE SOURCE: Polymer Research Institute, Polytechnic University, Brooklyn, NY, 11201, USA

SOURCE: Macromolecules (1999), 32(24), 8089-8093

CODEN: MAMOBX; ISSN: 0024-9297

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Poly(2,6-[4-phenylquinoline]) (I) and poly(2,6-[p-phenylene]-4-phenylquinoline) (II) were synthesized by the self-condensation of 5-acetyl-2-aminobenzophenone and 4-amino-4'-acetyl-3-benzoylbiphenyl, resp. They were soluble in acidic solvents. The UV λ_{\max} of I in aqueous H₂SO₄ did not change over wide acidity ranges, but the molar extinction coefficient increased with acidity. In low-acidity solns. two broad featureless fluorescent emission peaks at around 450 and 500 nm were observed, whereas in high-acidity solns. (e.g., 96% H₂SO₄), the peak at 500 nm disappeared and the peak at 450 nm greatly increased in intensity. The fluorescent properties of I and II were investigated as a function of concentration in HCOOH, CC12HCOOH, and CH₃SO₃H solns. At about .apprx.0.5 g/dL, only broad, featureless emission peaks appeared, but in dilute solns. (.apprx.0.0005 g/dL) the peaks were blue-shifted and the intensity was greatly increased (>600 times). These results were explained by the formation of an aggregate/excimer in concentrated solns.; upon dilution, the polymer chains were separated, resulting in decreased aggregation quenching. Thin films of I and II have similarly shaped UV absorption spectra (I, λ_{\max} 440 nm; II, λ_{\max} .apprx. 400 nm) and broad emission spectra at 550-600 nm. Films of the polymers I and II blended with poly(vinyl alc.) (PVA) were prepared. When the quinoline content in the blend is high (quinoline polymer:PVA = 1:1 by weight), the emission peak at 550 nm is broad with low intensity; however, upon increasing PVA concentration, the emission peak shifted to a lower wavelength, .apprx.450 nm, and the intensity was greatly increased. The broad emission peaks at 550 nm correspond to the excimer emission, and the high-intensity emission peaks at around 450 nm were due to the excited state of the isolated chains of the polymers, as a result of dilution. The emission peaks at around 470 nm also appeared when the quinoline moieties of the polymers were

protonated or partially methylated and intensities were very high. All these observations suggest that when the amount of pos. charge on the nitrogen atom of quinoline reaches a critical value, intermol. electrostatic repulsion reduces aggregate formation.

IT 59827-22-4P

RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(enhancement of fluorescent intensities of poly(quinolines) in solution and in solid state)

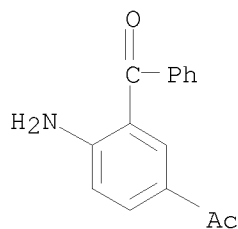
RN 59827-22-4 CA

CN Ethanone, 1-(4-amino-3-benzoylphenyl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 37104-17-9

CMF C15 H13 N O2



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 22 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 131:310567 CA

TITLE: Arene- and heteroarene-carboxamides as benzodiazepine receptors

INVENTOR(S): Dubroeuq, Marie-Christine; Renault, Christian; Le Fur, Gerard

PATENT ASSIGNEE(S): Pharmuka Laboratoires, Fr.

SOURCE: U.S., 12 pp.
CODEN: USXXAM

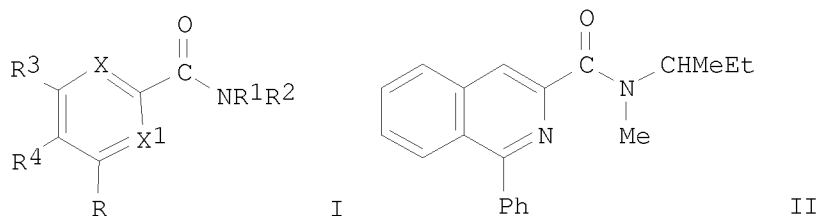
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------|
| US 4499094 | A | 19850212 | US 1983-482082 | 19830405 <-- |
| FR 2525595 | A1 | 19831028 | FR 1982-7217 | 19820427 <-- |
| FR 2525595 | B1 | 19850322 | | |
| PRIORITY APPLN. INFO.: | | | FR 1982-7217 | A 19820427 |
| GI | | | | |



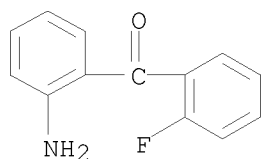
AB Carboxamides I [X, X1 = N, CH; R = Ph, substituted Ph, pyridyl, thienyl; R1, R2 = aliphatic, aromatic; NR1R2 = heterocyclic; R3R4 = (un)substituted CH:CHCH:CH, SCH:CH, CH:CHS] were prepared. Thus 2.4 g II was obtained by amidating 2.96 g of acid with 1.34 g MeNHCHMeEt. II had an affinity for benzodiazepine receptors of 2 nM. The compds. are useful as medicaments for the various applications of benzodiazepines.

IT 1581-13-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclocondensation with acetone)

RN 1581-13-1 CA

CN Methanone, (2-aminophenyl)(2-fluorophenyl)- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 23 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 131:214294 CA

TITLE: Preparation of substituted quinazolines and heterocyclic analogs as antagonists or positive modulators of AMPA receptors

INVENTOR(S): Upasani, Ravi; Cai, Sui X.; Lan, Nancy C.; Wang, Yan; Field, George; Fick, David B.

PATENT ASSIGNEE(S): Cocensys, Inc., USA

SOURCE: PCT Int. Appl., 117 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

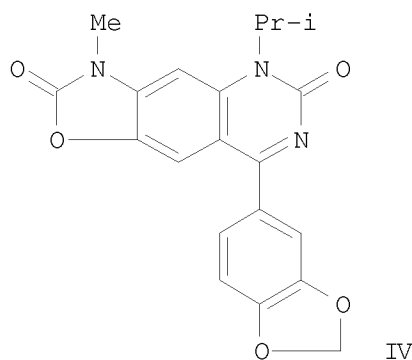
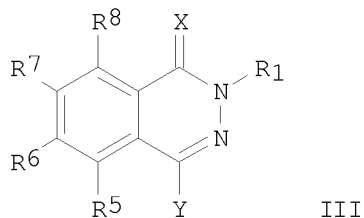
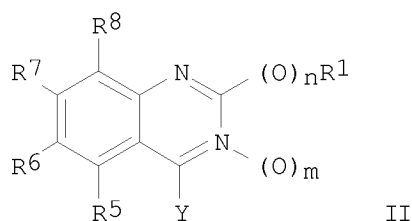
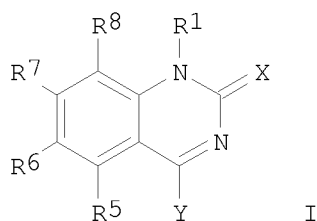
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|--------------|
| ----- | ---- | ----- | ----- | ----- |
| WO 9944612 | A1 | 19990910 | WO 1999-US4609 | 19990302 <-- |
| W: JP, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| EP 1066039 | A1 | 20010110 | EP 1999-911063 | 19990302 <-- |

R: BE, CH, DE, ES, FR, GB, IT, LI, NL, IE

| | | | | |
|------------------------|----|----------|----------------|-------------|
| JP 2002505288 | T | 20020219 | JP 2000-534214 | 19990302 |
| US 6465472 | B1 | 20021015 | US 2000-654839 | 20000901 |
| US 20030033089 | A1 | 20030213 | US 2002-219755 | 20020816 |
| US 6765006 | B2 | 20040720 | | |
| US 20040162299 | A1 | 20040819 | US 2004-772445 | 20040206 |
| PRIORITY APPLN. INFO.: | | | US 1998-76451P | P 19980302 |
| | | | WO 1999-US4609 | W 19990302 |
| | | | US 2000-654839 | A3 20000901 |
| | | | US 2002-219755 | A3 20020816 |

OTHER SOURCE(S): MARPAT 131:214294
GI



AB Substituted quinazolines and heterocyclic analogs (I, II, and III) [R1 = (un)substituted alkyl, alkenyl, or alkynyl; R5 and R8 = independently H, halogen, NO₂, NH₂, CN, alkanoylamido, OH, SH, alkoxy, (un)substituted alkyl, (hetero)aryl, heterocyclic, alkenyl, or alkynyl, etc.; R6 and R7 taken together = 5- or 6-membered carbocyclic or heterocyclic ring; X = O or S; Y = (hetero)aryl; n and m = independently 0 or 1] were prepared as antagonists or pos. modulators of AMPA receptors for treatment, prevention, or amelioration of global ischemia, amyotrophic lateral sclerosis, acute or chronic pain, or schizophrenia. Thus, 3-methyl-5-nitro-2(3H)-benzoxazolone was reduced to the amine over Pt/C in glacial acetic acid. Na cyanoborohydride was added to a suspension of the amine, THF, acetic acid, and acetone followed by treatment with NaOH and water to precipitate 5-(isopropylamino)-3-methyl-2(3H)-benzoxazolone. The substituted amine was converted to the ureido derivative by stirring with KCNO

in glacial acetic acid for 5 days. The urea was cyclized with piperonal in benzene and methanesulfonic acid to form the 3,4-dihydrooxazolo[4,5-g]quinazolin-2(1H)-one. The product was reduced by addition of KMnO₄ in H₂O followed by treatment with formalin to yield 1-isopropyl-4-(3,4-methylenedioxyphenyl)-8-methyl-7-oxooxazolo[4,5-g]quinazolin-2(1H)-one (IV). Selected compds. of the invention were tested for preferred binding to AMPA receptors and exhibited IC₅₀ values ranging from 0.2 to 13 μ M. The anticonvulsant activity of the AMPA antagonists was evaluated in the Maximal Electroshock-induced Seizure (MES) test. MES ED₅₀ values ranged from 1 to 10 mg/kg i.v.

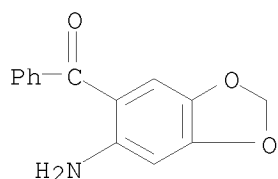
IT 40484-04-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(target compound; preparation of substituted quinazolines and heterocyclic analogs as antagonists or pos. modulators of AMPA receptors for treatment of global ischemia, amyotrophic lateral sclerosis, acute or chronic pain, or schizophrenia)

RN 40484-04-6 CA

CN Methanone, (6-amino-1,3-benzodioxol-5-yl)phenyl- (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 24 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 131:144943 CA

TITLE: Synthesis and properties of poly[2,6-(p-phenylvinyl)-4-(4'-octyloxybiphenyl-4-yl)quinoline]

AUTHOR(S): Kim, Jong Lae; Kim, Jai Kyeong; Hong, Sung Il

CORPORATE SOURCE: Department Fiber Polymer Science, Seoul National Univ., Seoul, 151741, S. Korea

SOURCE: Polymer Bulletin (Berlin) (1999), 42(5), 511-517

CODEN: POBUDR; ISSN: 0170-0839

PUBLISHER: Springer-Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

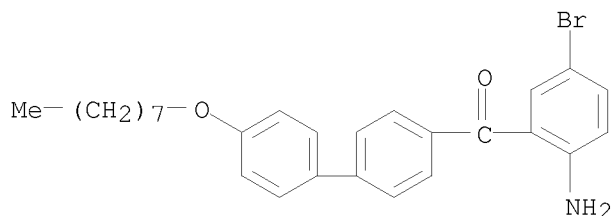
AB A novel polyquinoline (PQDBP8) containing the pendent 4'-octyloxybiphenyl group in the 4-position of the quinoline ring was prepd . by the acid-catalyzed polymerization (Friedlander quinoline synthesis) of 1-(4-{2-[4-amino-3-(4'-octyloxybiphenyl-4-carbonyl)-phenyl]vinyl}phenyl)ethanone. PQDBP8 showed highly thermal stability (Td = 384, Tg = 183°). PQDBP8 showed blue fluorescence in dilute solution (λ_{max} = 449 nm) and green fluorescence in solid state (λ_{max} = 494, 540 nm) due to excimer formation. EL spectrum of PQDBP8 lies in the green region (λ_{max} = 572 nm) and PQDBP8/PVK blend film lies in the blue region (λ_{max} = 446 nm).

IT 236110-47-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and polymerization of ([amino(octylbiphenylcarbonyl)phenyl]
vinyl}phenyl)ethanone monomer)

RN 236110-47-7 CA

CN Methanone, (2-amino-5-bromophenyl) [4'-(octyloxy) [1,1'-biphenyl]-4-yl]-
(CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 25 OF 231 CA COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 131:33061 CA

TITLE: Acetylene derivative-terminated thermosetting
quinoline polymers, their preparation
, and manufacture of their crosslinked coating films
with solvent resistance

INVENTOR(S): Marrocco, Matthew L., III; Hsu, Lien-chung

PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------|
| JP 11147950 | A | 19990602 | JP 1997-313910 | 19971114 <-- |
| PRIORITY APPLN. INFO.: | | | JP 1997-313910 | 19971114 |

AB Title compds. have quinoline repeating units and acetylene
group-containing terminals, preferably shown as E"(PQ)xE" (PQ = polymer chains
containing quinoline repeating units; x = 1-100,000; E" =
C.tplbond.CR, ArC.tplbond.R, CH2C.tplbond.CR, ArOCH2C.tplbond.CR,
OCH2C.tplbond.CR; R = H, alkyl, aryl, heteroaryl; Ar = arylene,
heteroarylene) and are manufactured by treating bis(fluoroquinolines) with
excess mol amount of diols under a condition for partial deprotonation of
diols to prepare OH-terminated polyquinolines, followed by
reaction with propargyl halides under a condition for partial
deprotonation of the polyquinolines. Crosslinked thermosetting
quinoline polymers are manufactured by heating the above compds. over
onset temperature of their exothermic reaction (Tonset). Solvent-resistant
coating films are manufactured by applying composition of the above compds. on
substrates, followed by heating the coatings over Tonset. Thus, 2.353
+ 10⁻³ mol g 6,6'-bis[2-(4-fluorophenyl)-4-phenylquinoline] (
prepared from 4,4'-diamino-3,3'-benzoylbiphenyl and
4-fluoroacetophenone) and 2.974 + 10⁻³ mol bisphenol AF were polymerized

10/534,015

at 150-200° for 29 h and terminated with 2.400×10^{-3} mol propargyl bromide to give a propargyl-terminated quinoline polymer, whose 10% cyclopentanone solution was cast on a glass plate and crosslinked with UV radiation to give a film with good thermal stability and solvent resistance.

IT 142252-00-4DP, (phenyl)propargyl-terminated

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manufacture of propargyl-terminated thermosetting quinoline polymers giving crosslinked coating films with heat and solvent resistance)

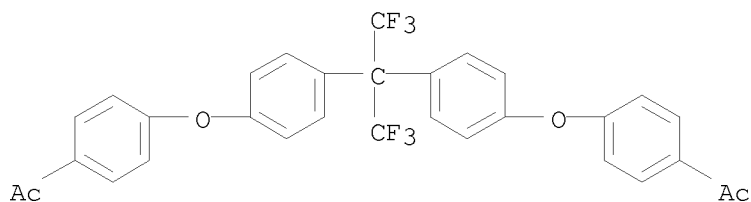
RN 142252-00-4 CA

CN Ethanone, 1,1'-[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis(4,1-phenyleneoxy-4,1-phenylene)]bis-, polymer with (4,4'-diamino[1,1'-biphenyl]-3,3'-diyl)bis[phenylmethanone] (9CI) (CA INDEX NAME)

CM 1

CRN 142059-54-9

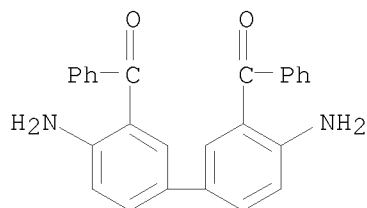
CMF C31 H22 F6 O4



CM 2

CRN 71713-10-5

CMF C26 H20 N2 O2



=> d his

(FILE 'HOME' ENTERED AT 14:12:52 ON 16 JUL 2008)

FILE 'REGISTRY' ENTERED AT 14:18:59 ON 16 JUL 2008

L1 STRUCTURE UPLOADED

L2 STRUCTURE UPLOADED

L3 STRUCTURE UPLOADED

L4 6 S L2 FULL

L5 1877 S L1 FULL

10/534,015

L6 0 S L3 FULL

FILE 'CA' ENTERED AT 14:19:55 ON 16 JUL 2008

L7 1103 S L5/PREP

L8 3 S L4

L9 3 S L4/PREP

FILE 'REGISTRY' ENTERED AT 14:21:59 ON 16 JUL 2008

L10 50 S L1

FILE 'CA' ENTERED AT 14:22:36 ON 16 JUL 2008

S L1

FILE 'REGISTRY' ENTERED AT 14:22:38 ON 16 JUL 2008

L11 50 S L1

FILE 'CA' ENTERED AT 14:22:39 ON 16 JUL 2008

L12 49 S L11

L13 3056 S L5

L14 0 S L13 AND L8

FILE 'CASREACT' ENTERED AT 14:23:35 ON 16 JUL 2008

L15 0 S L2

L16 2 S L2 FULL

L17 0 S L3 FULL

FILE 'CA' ENTERED AT 14:25:15 ON 16 JUL 2008

L18 447 S L13 AND QUINOLIN?

L19 400 S PREP? AND L18

L20 231 S L19 AND PY<2002

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

STN INTERNATIONAL LOGOFF AT 14:28:45 ON 16 JUL 2008